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Psychopathic Personality Traits Model (PPTM): A new approach to defining psychopathy

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Introduction

The concept of psychopathy, often conceptualized as the causal antecedent to violent offending, has long been of interest within the criminal justice system. Despite this, psychopathy has continued to be difficult to assess, with research in the area compromised by the absence of an established definition of the disorder (O’Kane, Fawcett, & Blackburn, 1996; Skeem, Polaschek, Patrick, & Lilienfeld, 2011). The first comprehensive conceptualization of psychopathy was proposed by Cleckley in 1941. Cleckley suggested the prototypical psychopath to be characterized by the following 16 traits: superficial charm, absence of delusions, absence of “nervousness”, unreliability, untruthfulness, lack of remorse and shame, antisocial behavior, poor judgement and failure to learn by experience, pathological egocentricity, poverty in affective reactions, loss of insight, unresponsiveness in interpersonal relations, fantastic and uninviting behavior, rare suicidal behavior, impersonal sex life, and failure to follow any life plan.

This Cleckleyan representation of psychopathy served as the basis for designing some widely employed psychopathic assessment tools, such as the Psychopathy Checklist (PCL; Hare, 1980) and its updated version, the Psychopathy Checklist – Revised (PCL-R; Hare, 1991, 2003). The PCL-R is commonly presented as consisting of four correlated factors: (1) interpersonal manipulation, (2) callous affect, (3) erratic lifestyle, and (4) antisocial/criminal behavior. Psychopathy, as assessed using the PCL-R and associated measures, has been shown to be predictive of recidivism and aggression (see Dhingra & Boduszek, 2013 for a review). However, given that numerous items within the measure pertain directly to criminal and antisocial behavior alongside the suggestion that future behavior is best predicted by past behavior, such findings are not surprising. Indeed, the formulation of psychopathy as grasped by the PCL(-R) and its derivatives, is weighted heavily towards indicators of behavioral expressions of the disorder, such as deviancy and maladjustment, which can have a profound

influence on the scales' predictive utility for criminal behavior. For instance, the exclusion of factor 4 of the PCL-R (encompassing items that relate to antisocial behavior, including poor behavior controls, early behavior problems, juvenile delinquency, revocation of conditional release, and criminal versatility) reduces the predictive validity of the measure in regards to future reoffending (Polaschek, 2015; Yang, Wong, & Coid, 2010). Even though the affective and interpersonal manipulation components correspond with Cleckley's original conceptualization of a psychopathic personality, erratic lifestyle and antisocial behavior more closely resemble measures of criminal behavior and Antisocial Personality Disorder (Harpur *et al.*, 1989). Notably, prior research revealed that only the affective and interpersonal factors' items work equivalently well across race and gender (Bolt, Hare, Vitale, & Newman, 2004; Cooke, Kosson, & Michie, 2001), with poor generalizability of the remaining factors being reported (McDermott *et al.*, 2000). Further still, antisocial traits were found to diminish over time, suggesting that the generalizability of this element of the construct may also be affected by the age of respondents. A recent empirical investigation by Debowska *et al.* (2017) demonstrated that Hare's model of psychopathy cannot be used in the same way in forensic and non-forensic populations due to inclusion of antisocial factor. It appears, therefore, that items referring to criminal/antisocial tendencies should not be included in psychopathy measures.

The essence of psychopathy seems to be captured more successfully through assessments of affective deficits and interpersonal unresponsiveness. The proneness to contravene social and legal norms, on the other hand, appears to be *a possible behavioral outcome* of a psychopathic personality (Boduszek & Debowska, 2016; Skeem & Cooke, 2010a, b). In line with such a notion, a growing body of evidence suggests that psychopathic personalities can thrive in both criminal and non-criminal contexts. For example, the prevalence of psychopathic traits was demonstrated to be higher in a corporate sample than

that found in community samples (Babiak, Neumann, & Hare, 2010; Hassall, Boduszek, & Dhingra, 2015). Interestingly, heightened psychopathy scores in U.S. presidents were correlated with a better-rated presidential performance (Lilienfeld *et al.*, 2012). As such, if criminal/antisocial tendencies are just one possible manifestation of psychopathy, other non-criminal/antisocial behaviors in which psychopaths may partake should also be accounted for. A simplified solution, therefore, would be to exclude antisocial/criminal items from psychopathy measures altogether (Boduszek & Debowska, 2016).

A new personality-based model of psychopathy: Psychopathic Personality Traits Model (PPTM)

Although Cleckley's conceptualization of psychopathy received the most widespread acceptance among researchers and clinicians, some of the traits listed in his clinical profile, such as pathological egocentricity, are largely missing from the existing psychopathy assessment tools. Further, we have recently suggested that criminal/antisocial tendencies are the consequence of psychopathic traits, rather than an integral part of the disorder, and individuals with increased psychopathic traits may be successful in both criminal and non-criminal endeavors (Boduszek & Debowska, 2016; Boduszek, Dhingra, Hyland, & Debowska, 2016). Thus, given the broad spectrum of activities in which psychopaths may engage, the inclusion of antisocial items in psychopathy construct appears counterproductive. Instead, there is a need for a clean personality model of psychopathy, which could be used among both forensic and non-forensic populations (Boduszek & Debowska, 2016; Johansson *et al.*, 2002). Accordingly, new generation of research which distinguishes between personality deviation and social deviance is warranted (Skeem & Cooke, 2010b).

In an effort to address these issues, we sought to create and validate a new model of psychopathy – Psychopathic Personality Traits Model (PPTM) with an associated brief self-

report scale (the Psychopathic Personality Traits Scale – PPTS; Boduszek, Debowska, Dhingra, & DeLisi, 2016). The brief PPTS is used for research purposes only, but we are currently working on an extended version and a diagnostic tool. The PPTM grasps the essence of a psychopathic personality regardless of individuals' age, gender, cultural background, and criminal history. Central to our new model of psychopathy are four components: affective responsiveness, cognitive responsiveness, interpersonal manipulation, and egocentricity (see Figure 1).

(Please insert Figure 1 about here)

The lack of *affective responsiveness* component reflects characteristics of low affective empathy and emotional shallowness. Individuals scoring high on this component are characterized by inability to emotionally respond to another person's feelings. This dimension resembles the callous affect factor of the PCL-R, which has been constantly demonstrated to be the core feature of a psychopathic personality. The lack of *cognitive responsiveness* component, on the other hand, measures the inability to understand the emotional state of other, mentally represent another person's emotional processes, and emotionally engage with others at a cognitive level. The distinction between affective and cognitive responsiveness to others has been neglected in psychopathy research published to date. Nonetheless, a recent study demonstrated that prisoners with increased psychopathic traits were deficient in understanding affective states (emotions) but not cognitive states (beliefs) (Shamay-Tsoory, Harari, Aharon-Peretz, & Levkovitz, 2010). These findings indicate that reduced cognitive responsiveness to others' emotional states constitutes an important part of the psychopathy construct. Furthermore, although prior research has

revealed the importance of intelligence (IQ) in psychopathy, past psychopathy models have failed to control for this aspect in psychopathy assessment. This is a serious limitation because individuals with high IQ are able to learn how to recognize certain emotions and respond in expected ways. For example, Bate, Boduszek, Dhingra and Bale (2014) demonstrated that intelligence is a moderator in the relationship between psychopathy and emotional responding, showing that individuals with increased psychopathic traits who score higher on intelligence (1 SD above the sample mean) are able to respond in a socially desirable manner to emotionally provoking stimuli. In order to verify whether deficiency in cognitive responsiveness to emotional states of others is a universal feature of psychopathy or is contingent on intelligence levels, future research using the PPTM should control for participants' IQ. The third component of the PPTM, *interpersonal manipulation*, reflects characteristics such as superficial charm, grandiosity, and intentional deceitfulness. Manipulation is viewed as largely malicious and destructive of optimal human relationships. This aspect has been accounted for in past psychopathy models, including the PCL-R. Finally, *egocentricity* assesses an individual's tendency to focus on one's own interests, beliefs, and attitudes. In our opinion, egocentricity is one of the most important traits observed among individuals with increased psychopathic traits. According to Cleckley (1941), "the psychopath is always distinguished by egocentricity which is pathological and cannot be compared with the one witnessed in non-psychopathic individuals" (p. 346). This self-centeredness is closely linked with incapacity for love, other than self-love. Having said that, individuals with increased psychopathic traits are able to express positive feelings towards self and anyone whom they consider an "extension of self" (for example children or parents). However, this expression of feelings towards those who are regarded as an extension of self is only at the cognitive level. Items referring to egocentricity have been included in some established psychopathy measures (e.g., the PCL-R and the Psychopathic

Traits Inventory – Revised [PPI-R; Lilienfeld & Widows, 2005]). However, since those items were not conceptualized as forming a separate psychopathy dimension, the predictive utility of self-centeredness over the remaining traits could not be investigated. Notably, Cooke, Hart, Logan, and Michie (2012) included “self domain”, which resembles the PPTM egocentricity factor, as a separate dimension in their Comprehensive Assessment of Psychopathic Personality (CAPP) model. We also suggest that psychopaths’ egocentricity and reduced affective responsiveness influence their ability to recognize other individuals’ emotional states (cognitive responsiveness). Prominent conceptual models implicate structural and functional deficits in limbic brain systems, particularly the amygdala (see Debowska, Boduszek, Hyland, Goodson, 2014), as the neurological cause of the affective deficits in psychopathy. Prior research on empathic processing suggested that psychopathy is associated with overall recognition deficits (Dolan & Fullam, 2006; Hastings, Tangney, & Stuewig, 2008), as well as deficits in recognizing fear (Blair, Colledge, Murray, & Mitchell, 2001), sadness, and happiness (Dolan & Fullam, 2006; Hastings et al., 2008). In another study, incarcerated offenders with increased psychopathic traits showed deficiency in inferring emotional states (Shamay-Tsoory *et al.*, 2010). Finally, Brook and Kosson (2013) reported impaired cognitive empathy and difficulty understanding “the full spectrum of emotions displayed by people” (p. 162) among psychopaths. This is congruent with Cleckley’s (1941) suggestion that psychopathic individuals demonstrate general unresponsiveness and poverty in affect in interpersonal relations.

Our research explorations to date have displayed empirical evidence of this new conceptualization of psychopathy, validating the model’s utility in a sample of 1,794 inmates from maximum and medium security prisons, and in excess of 3,000 participants from non-forensic settings, including community adults, university students, and children (age range 10 – 14 years). The appropriateness of the identified factorial solution was supported by the

differential predictive validity of the four psychopathy facets in a large sample of prisoners (Boduszek *et al.*, 2016). Inmates scoring higher on affective responsiveness, but not on cognitive responsiveness, were significantly more likely to commit violent offences and have increased criminal social identity scores. Both affective responsiveness and cognitive responsiveness correlated significantly with self-esteem; however, those associations were in opposite directions. Specifically, affective responsiveness was associated with higher and cognitive responsiveness with lower levels of self-esteem. Additionally, cognitive responsiveness was significantly positively associated with child sexual abuse myths acceptance. In contrast, association between this external criterion and affective responsiveness was negative yet statistically non-significant. Given the differing predictive utility of affective responsiveness and cognitive responsiveness, these two facets should be considered as unique and distinct from each other. As for the remaining psychopathy factors, interpersonal manipulation formed significant positive associations with child sexual abuse myths acceptance, criminal social identity, and a significant negative correlation with self-esteem. Egocentricity was found to predict increased scores on child sexual abuse myths scale, attitudes towards sexual dating violence, and criminal social identity. This psychopathy dimension was also associated with violent offending. In light of this evidence, the inclusion of egocentricity items within psychopathy measures yet the failure to control for this aspect of the disorder as a separate and unique dimension appears misguided. Such research challenging the widely accepted notion of psychopathy and associated factors can also challenge the assumptions on which current criminal justice practices are based, subsequently leading to improved risk assessment, treatment provision, and prevention strategies.

Profiling psychopathy using the PPTM

Some psychopathy studies, mostly utilizing the PCL-R or its derivatives, have focused on establishing the prevalence of psychopathy. This past research revealed large discrepancies in the occurrence of psychopathic traits across samples drawn from different populations. More specifically, while the PCL-R-based estimated occurrence of psychopathy in the general population is between 0.3-2% (males: 1-2%, females: 0.3-0.7%; Patrick & Drislane, 2015), the prevalence of psychopathy in the offender population is suggested to oscillate between 15–25% (Lilienfeld & Arkowitz, 2007; Woodworth & Porter, 2002). Nonetheless, although the PCL-R scores were most often suggested to be best captured by a four-factor model, reflecting interpersonal, affective, lifestyle, and antisocial characteristics, studies into the prevalence of psychopathy tend to utilize total scale scores. Similarly, cut-off points used to diagnose the condition rely on the sum of scores rather than ratings obtained on these separate dimensions. Such an approach to measurement and diagnosis assumes variations in trait intensity (quantitative differences) but not in the constellation of psychopathic traits (qualitative differences) across individuals, which remains inconsistent with the literature (Colins, Fanti, Salekin, & Andershed, 2016). Relying on the PCL-R total scores could have led to exclusion of participants scoring high on core interpersonal/affective but low on lifestyle/antisocial traits of psychopathy, resulting in skewed findings. We suggest that psychopathy may be over-diagnosed in criminal populations due to (a) the widespread use of measures based upon behavioral conception of psychopathy (such as the PCL-R) and (b) the utilization of cut-off points derived from the sum of scores, which defies research suggesting that psychopathy is multi-dimensional in character (Boduszek & Debowska, 2016; Boduszek *et al.*, 2015; Debowska, Boduszek, Kola, & Hyland, 2014; Kennealy, Skeem, Walters, & Camp, 2010).

In our recent study with the PPTM using a person- as opposed to variable-centered approach to data analysis (Boduszek, Debowska, & Willmott, 2017b), we identify five meaningful classes (groups) of psychopathic traits among a systematically selected large representative sample of Polish prisoners. The results of latent profile analysis suggested that psychopathy should be interpreted as a continuum with varying levels of each dimension across individuals, rather than a dichotomous entity. Class 1, consisting of 44% of prisoners, was characterized by low mean scores on all four personality-based psychopathy dimensions and hence has been labelled the “low psychopathy group”. Class 2, consisting 16.8% of prisoners, was characterized by moderate mean scores on affective and cognitive responsiveness and relatively low ratings on interpersonal manipulation and egocentricity. This group was labelled the “moderate affective/cognitive responsiveness group”. We also identified the “high interpersonal manipulation group” (class 3; 20.8% of prisoners), characterized by low mean scores on affective responsiveness, cognitive responsiveness, and egocentricity and high on interpersonal manipulation. Inmates in this class were significantly more likely to be convicted of property offences than those in class 1. Consistent with earlier findings in regard to socioeconomic status of individuals with such traits, offenders in class 3, compared with class 1, were also more likely to engage in white-collar crime, which may be indicative of a higher social class background. Further, similar ratings on affective and cognitive responsiveness to those noted for class 2 in the present analysis were recorded for prisoners in class 4; yet this particular group was also distinguished by moderate mean scores on egocentricity and high interpersonal manipulation (the “moderate psychopathy group”; 10.8% of inmates). Finally, the “high psychopathy group” (class 5; with very high mean scores on affective responsiveness, moderate cognitive responsiveness, and high interpersonal manipulation and egocentricity) was identified. This group constituted 7.1% of prisoners, which indicates that most inmates (detained in maximum and medium security

units) do not meet the diagnostic criteria for psychopathy. Using the same methodology, our most recent research revealed similar psychopathy profiles among various populations. Most interestingly, membership in high psychopathy group was comparable for all adult samples (772 US prisoners = 7.6%; 1,201 UK community adults = 5.9%; 2,080 university students = 7.4%), but not for adolescents ($n = 475$), who were more likely than adults to have increased ratings on all PPTS dimensions (12.4%) (Boduszek, Debowska, Sherretts, Boulton & Willmott, 2017a). High psychopathy groups were earlier extracted, among others, by Colins *et al.* (2016) and Dhingra, Boduszek, and Kola (2015); however, the class membership in the latter study amounted to 26.4%. Dhingra *et al.* profiled respondents using a behavioral measure of psychopathy (the Psychopathy Checklist: Screening Version [PCL:SV; Hart, Cox, & Hare, 1995) and hence the current results are not directly comparable with this earlier research. Nonetheless, it appears that the high rates of psychopathy reported for some populations (those incarcerated and institutionalized in particular) may be accounted for by the inclusion of indicators of behavioral expressions of the condition (Boduszek & Debowska, 2016; Edens *et al.*, 2001; Patrick, 2007; Patrick, Hicks, Nichol, & Krueger, 2007; Rogers, 1995).

Conclusions and Future Directions

As explicated in the current chapter, the PPTM offers an alternative psychopathy assessment based on personality traits. The PPTM consists of four dimensions, including affective responsiveness, cognitive responsiveness, interpersonal manipulation, and egocentricity. It is also conceptualized that intelligence levels moderate that relationship between the afore-mentioned psychopathic traits and behavioral outcomes. Importantly, while antisocial/criminal tendencies/behaviors may constitute one possible expression of psychopathy, they are not treated as integral to psychopathy construct within the newly

developed framework. Using this personality approach to psychopathy assessment, we demonstrated that the prevalence of psychopathy among individuals incarcerated in medium and maximum security prisons amounts to approximately 7% of the total prison population and hence is *much lower* than previously speculated and comparable with the prevalence found among non-forensic adult samples (Boduszek *et al.*, 2017a, b). Using a similar research methodology¹, Colins *et al.* (2016) found that as much as 12% of adults in the general population belong in a psychopathic personality group. This may indicate that the difference in intensity of psychopathic traits between forensic and non-forensic populations is not as pronounced as reported to date. In light of this, it is recommended that both researchers and practitioners re-evaluate the previously utilized conceptualization of psychopathy and assessment methods. Additionally, psychopathy measures which index behavioral traits and rely on cut-off points for total scale ratings should be used with caution in clinical settings. We anticipate that the method of defining and measuring psychopathy upon which the PPTM is based, will (a) address the numerous problems identified in past psychopathy research which treated antisocial/criminal behaviors as vital to psychopathy construct and (b) allow for reliable psychopathy assessment among forensic and non-forensic populations (for more details with regard to problems with prior psychopathy measurement see chapter titled “The PCL-R family of psychopathy measures: Dimensionality and predictive utility of the PCL-R, PCL: SV, PCL: YV, SRP-III, and SRP-SF” in the current book).

¹ With the exception of including some behavioral characteristics (i.e., impulsive-irresponsible traits) in the assessment of psychopathy, which could partly explain the high class membership rates.

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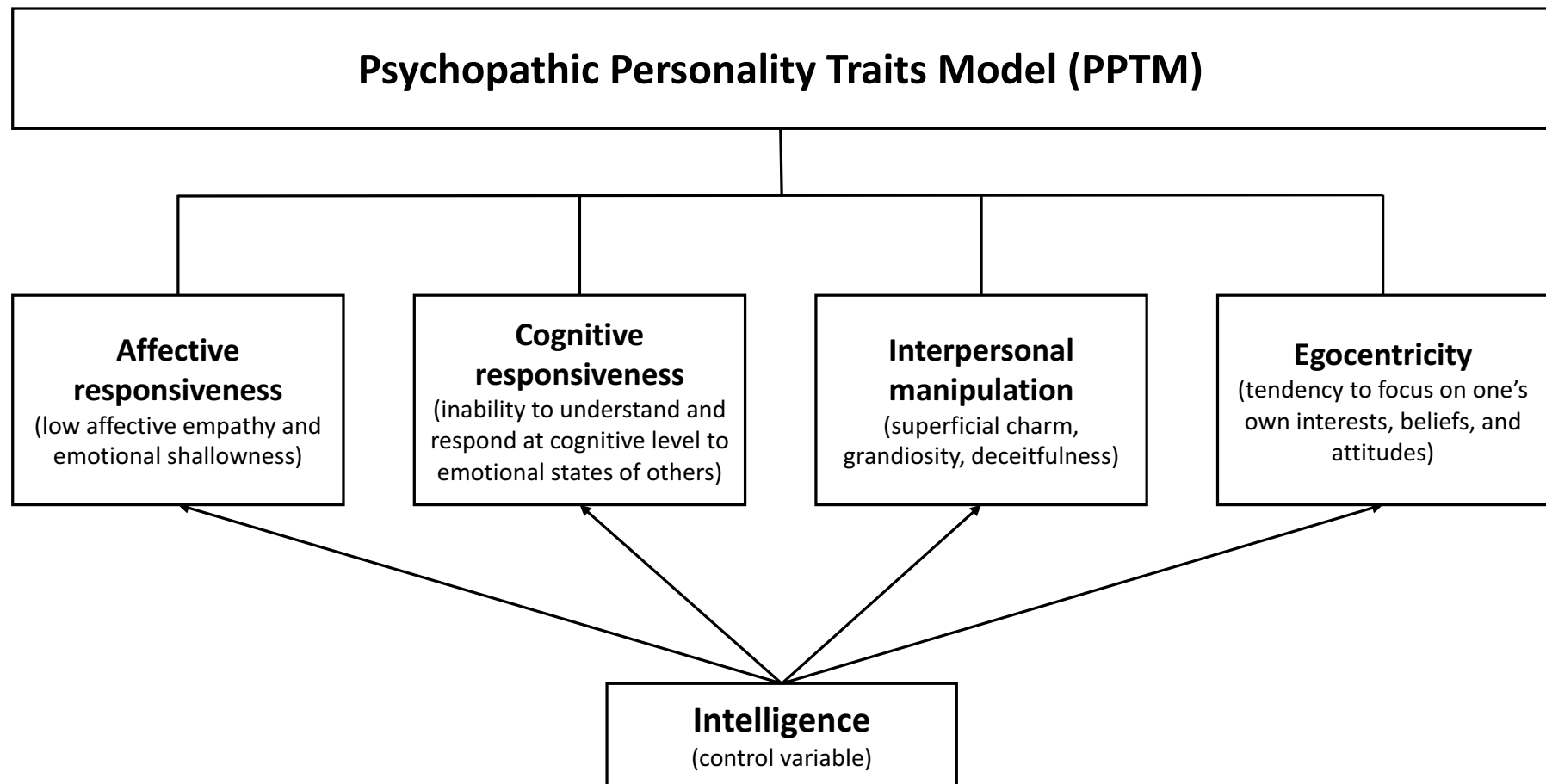


Figure 1. The Psychopathic Personality Traits Model (PPTM).